1646

ENTERED

RAW SEQUENCE LISTING   DATE: 01/21/2004
PATENT APPLICATION: **US/10/643,627**   TIME: 14:30:11

Input Set : **N:\Crf3\RULE60\10643627.RAW.txt**
Output Set: **N:\CRF4\01212004\J643627.raw**

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 1 <110> APPLICANT: Sundelin, Johan
 2        Scarborough, Robert M.
 3 <120> TITLE OF INVENTION: Recombinant C140 Receptor, Its Agonists and Antagonists, and
 4        Nucleic Acids Encoding the Receptor
 5 <130> FILE REFERENCE: 44481-5006-09-US
 6 <140> CURRENT APPLICATION NUMBER: 10/643,627
 7 <141> CURRENT FILING DATE: 2003-08-19
 8 <150> PRIOR APPLICATION NUMBER: US/10/127,691
 9 <151> PRIOR FILING DATE: 2002-04-23
10 <150> PRIOR APPLICATION NUMBER: US 08/097,938
11 <151> PRIOR FILING DATE: 1993-07-26
12 <150> PRIOR APPLICATION NUMBER: US 08/390,301
13 <151> PRIOR FILING DATE: 1995-01-25
14 <150> PRIOR APPLICATION NUMBER: US 08/474,414
15 <151> PRIOR FILING DATE: 1995-06-07
16 <160> NUMBER OF SEQ ID NOS: 63
17 <170> SOFTWARE: PatentIn Ver. 2.1
19 <210> SEQ ID NO: 1
20 <211> LENGTH: 1475
21 <212> TYPE: DNA
22 <213> ORGANISM: Mus musculus
23 <220> FEATURE:
24 <221> NAME/KEY: CDS
25 <222> LOCATION: (232)..(1416)
26 <223> OTHER INFORMATION: C140 receptor, genomic DNA and deduced protein
27        sequences
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31        acacaagaat tagacttcaa ccgtcaccaa ctgccctgtg taggacggtc ggtcactgaa 180
32        agagaatatt gtctgcaata ctctaatgac atctgtctgt gttcatctga a atg ttc 237
33                                                                 Met Phe
34                                                                  1
35        cat tta aaa cac agc agc ctt act gtt gga cca ttt atc tca gta atg 285
36        His Leu Lys His Ser Ser Leu Thr Val Gly Pro Phe Ile Ser Val Met
37                 5                   10                  15
38        att ctg ctc cgc ttt ctt tgt aca gga cgc aac aac agt aaa gga aga 333
39        Ile Leu Leu Arg Phe Leu Cys Thr Gly Arg Asn Asn Ser Lys Gly Arg
40                20                  25                  30
41        agt ctt att ggc aga tta gaa acc cag cct cca atc act ggg aaa ggg 381
42        Ser Leu Ile Gly Arg Leu Glu Thr Gln Pro Pro Ile Thr Gly Lys Gly
43         35                  40                  45                  50
44        gtt ccg gta gaa cca ggc ttt tcc atc gat gag ttc tct gcg tcc atc 429
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45        Val Pro Val Glu Pro Gly Phe Ser Ile Asp Glu Phe Ser Ala Ser Ile
46                        55              .         60              65
47        ctc acc ggg aag ctg acc acg gtc ttt ctt ccg gtc gtc tac att att     477
48        Leu Thr Gly Lys Leu Thr Thr Val Phe Leu Pro Val Val Tyr Ile Ile
49                        70                  75              80
50        gtg ttt gtg att ggt ttg ccc agt aat ggc atg gcc ctc tgg atc ttc     525
51        Val Phe Val Ile Gly Leu Pro Ser Asn Gly Met Ala Leu Trp Ile Phe
52                        85                  90              95
53        ctt ttc cga acg aag aag aaa cac ccc gcc gtg att tac atg gcc aac     573
54        Leu Phe Arg Thr Lys Lys Lys His Pro Ala Val Ile Tyr Met Ala Asn
55                    100                 105             110
56        ctg gcc ttg gcc gac ctc ctc tct gtc atc tgg ttc ccc ctg aag atc     621
57        Leu Ala Leu Ala Asp Leu Leu Ser Val Ile Trp Phe Pro Leu Lys Ile
58        115                     120                 125             130
59        tcc tac cac cta cat ggc aac aac tgg gtc tac ggg gag gcc ctg tgc     669
60        Ser Tyr His Leu His Gly Asn Asn Trp Val Tyr Gly Glu Ala Leu Cys
61                        135                 140             145
62        aag gtg ctc att ggc ttt ttc tat ggt aac atg tat tgc tcc atc ctc     717
63        Lys Val Leu Ile Gly Phe Phe Tyr Gly Asn Met Tyr Cys Ser Ile Leu
64                        150                 155             160
65        ttc atg acc tgc ctc agc gtg cag agg tac tgg gtg atc gtg aac ccc     765
66        Phe Met Thr Cys Leu Ser Val Gln Arg Tyr Trp Val Ile Val Asn Pro
67                    165                 170                 175
68        atg gga cac ccc agg aag aag gca aac atc gcc gtt ggc gtc tcc ttg     813
69        Met Gly His Pro Arg Lys Lys Ala Asn Ile Ala Val Gly Val Ser Leu
70                    180                 185                 190
71        gca atc tgg ctc ctg att ttt ctg gtc acc atc cct ttg tat gtc atg     861
72        Ala Ile Trp Leu Leu Ile Phe Leu Val Thr Ile Pro Leu Tyr Val Met
73        195                     200                 205             210
74        aag cag acc atc tac att cca gca ttg aac atc acc acc tgt cac gat     909
75        Lys Gln Thr Ile Tyr Ile Pro Ala Leu Asn Ile Thr Thr Cys His Asp
76                        215                 220             225
77        gtg ctg cct gag gag gta ttg gtg ggg gac atg ttc aat tac ttc ctc     957
78        Val Leu Pro Glu Glu Val Leu Val Gly Asp Met Phe Asn Tyr Phe Leu
79                        230             .   235             240
80        tca ctg gcc att gga gtc ttc ctg ttc ccg gcc ctc ctt act gca tct    1005
81        Ser Leu Ala Ile Gly Val Phe Leu Phe Pro Ala Leu Leu Thr Ala Ser
82                    245                 250                 255
83        gcc tac gtg ctc atg atc aag acg ctc cgc tct tct gct atg gat gaa    1053
84        Ala Tyr Val Leu Met Ile Lys Thr Leu Arg Ser Ser Ala Met Asp Glu
85                    260                 265                 270     .
86        cac tca gag aac aaa agg cag agg gct atc cga ctc atc atc acc gtg    1101
87        His Ser Glu Lys Lys Arg Gln Arg Ala Ile Arg Leu Ile Ile Thr Val
88        275                     280                 285             290
89        ctg gcc atg tac ttc atc tgc ttt gct cct agc aac ctt ctg ctc gta    1149
90        Leu Ala·Met Tyr Phe Ile Cys Phe Ala Pro Ser Asn Leu Leu Leu Val
91                        295                 300             305
92        gtg cat tat ttc cta atc aaa acc cag agg cag agc cac gtc tac gcc    1197
93        Val His Tyr Phe Leu Ile Lys Thr Gln Arg Gln Ser His Val Tyr Ala
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Input Set : **N:\Crf3\RULE60\10643627.RAW.txt**
Output Set: **N:\CRF4\01212004\J643627.raw**

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 94                   310              315              320
 95          ctc tac ctt gtc gcc ctc tgc ctg tcg acc ctc aac agc tgc ata gac    1245
 96          Leu Tyr Leu Val Ala Leu Cys Leu Ser Thr Leu Asn Ser Cys Ile Asp
 97                   325              330              335
 98          ccc ttt gtc tat tac ttt gtc tca aaa gat ttc agg gat cac gcc aga    1293
 99          Pro Phe Val Tyr Tyr Phe Val Ser Lys Asp Phe Arg Asp His Ala Arg
100                   340              345              350
101          aac gcg ctc ctc tgc cga agt gtc cgc act gtg aat cgc atg caa atc    1341
102          Asn Ala Leu Leu Cys Arg Ser Val Arg Thr Val Asn Arg Met Gln Ile
103          355                360              365              370
104          tcg ctc agc tcc aac aag ttc tcc agg aag tcc ggc tcc tac tct tca    1389
105          Ser Leu Ser Ser Asn Lys Phe Ser Arg Lys Ser Gly Ser Tyr Ser Ser
106                   375              380              385
107          agc tca acc agt gtt aaa acc tcc tac tgagctgtac ctgaggatgt          1436
108          Ser Ser Thr Ser Val Lys Thr Ser Tyr
109                   390              395
110          caagcctgct tgatgatgat gatgatgatg gtgtgtgtg                         1475
112  <210> SEQ ID NO: 2
113  <211> LENGTH: 395
114  <212> TYPE: PRT
115  <213> ORGANISM: Mus musculus
116  <400> SEQUENCE: 2
117          Met Phe His Leu Lys His Ser Ser Leu Thr Val Gly Pro Phe Ile Ser
118            1               5                10                    15
119          Val Met Ile Leu Leu Arg Phe Leu Cys Thr Gly Arg Asn Asn Ser Lys
120                   20                25                30
121          Gly Arg Ser Leu Ile Gly Arg Leu Glu Thr Gln Pro Pro Ile Thr Gly
122                   35                40                45
123          Lys Gly Val Pro Val Glu Pro Gly Phe Ser Ile Asp Glu Phe Ser Ala
124            50                    55                60
125          Ser Ile Leu Thr Gly Lys Leu Thr Thr Val Phe Leu Pro Val Val Tyr
126            65                    70                75                    80
127          Ile Ile Val Phe Val Ile Gly Leu Pro Ser Asn Gly Met Ala Leu Trp
128                   85                90                    95
129          Ile Phe Leu Phe Arg Thr Lys Lys Lys His Pro Ala Val Ile Tyr Met
130                   100               105               110
131          Ala Asn Leu Ala Leu Ala Asp Leu Leu Ser Val Ile Trp Phe Pro Leu
132                   115               120               125
133          Lys Ile Ser Tyr His Leu His Gly Asn Asn Trp Val Tyr Gly Glu Ala
134                   130               135               140
135          Leu Cys Lys Val Leu Ile Gly Phe Phe Tyr Gly Asn Met Tyr Cys Ser
136          145                150               155               160
137          Ile Leu Phe Met Thr Cys Leu Ser Val Gln Arg Tyr Trp Val Ile Val
138                   165               170               175
139          Asn Pro Met Gly His Pro Arg Lys Lys Ala Asn Ile Ala Val Gly Val
140                   180               185               190
141          Ser Leu Ala Ile Trp Leu Leu Ile Phe Leu Val Thr Ile Pro Leu Tyr
142                   195               200               205
143          Val Met Lys Gln Thr Ile Tyr Ile Pro Ala Leu Asn Ile Thr Thr Cys
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RAW SEQUENCE LISTING   DATE: 01/21/2004
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Input Set : N:\Crf3\RULE60\10643627.RAW.txt
Output Set: N:\CRF4\01212004\J643627.raw

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144            210               215               220
145            His Asp Val Leu Pro Glu Glu Val Leu Val Gly Asp Met Phe Asn Tyr
146            225             230               235               240
147            Phe Leu Ser Leu Ala Ile Gly Val Phe Leu Phe Pro Ala Leu Leu Thr
148                          245               250               255
149            Ala Ser Ala Tyr Val Leu Met Ile Lys Thr Leu Arg Ser Ser Ala Met
150                        260               265               270
151            Asp Glu His Ser Glu Lys Lys Arg Gln Arg Ala Ile Arg Leu Ile Ile
152                      275               280               285
153            Thr Val Leu Ala Met Tyr Phe Ile Cys Phe Ala Pro Ser Asn Leu Leu
154                    290               295               300
155            Leu Val Val His Tyr Phe Leu Ile Lys Thr Gln Arg Gln Ser His Val
156            305               310               315               320
157            Tyr Ala Leu Tyr Leu Val Ala Leu Cys Leu Ser Thr Leu Asn Ser Cys
158                          325               330               335
159            Ile Asp Pro Phe Val Tyr Tyr Phe Val Ser Lys Asp Phe Arg Asp His
160                        340               345               350
161            Ala Arg Asn Ala Leu Leu Cys Arg Ser Val Arg Thr Val Asn Arg Met
162                      355               360               365
163            Gln Ile Ser Leu Ser Ser Asn Lys Phe Ser Arg Lys Ser Gly Ser Tyr
164                      370               375               380
165            Ser Ser Ser Ser Thr Ser Val Lys Thr Ser Tyr
166            385               390               395
168 <210> SEQ ID NO: 3
169 <211> LENGTH: 1255
170 <212> TYPE: DNA
171 <213> ORGANISM: Homo sapiens
172 <220> FEATURE:
173 <221> NAME/KEY: CDS
174 <222> LOCATION: (56)..(1249)
175 <223> OTHER INFORMATION: C140 receptor, genomic DNA and deduced protein
176       sequences
177 <400> SEQUENCE: 3
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179                                                                    Met
180                                                                     1
181       aat gta ctt tca ttt gaa caa acc agt gtt act gct gaa aca ttt att  106
182       Asn Val Leu Ser Phe Glu Gln Thr Ser Val Thr Ala Glu Thr Phe Ile
183                    5                  10                  15
184       tct gta atg acc ctt gtc ttc ctt tct tgt aca gga acc aat aga tcc  154
185       Ser Val Met Thr Leu Val Phe Leu Ser Cys Thr Gly Thr Asn Arg Ser
186                  20                  25                  30
187       tct aaa gga aga agc ctt att ggt aag gtt gat ggc aca tcc cac gtc  202
188       Ser Lys Gly Arg Ser Leu Ile Gly Lys Val Asp Gly Thr Ser His Val
189            35                  40                  45
190       act gga aaa gga gtt aca gtt gaa aca gtc ttt tct gtg gat gag ttt  250
191       Thr Gly Lys Gly Val Thr Val Glu Thr Val Phe Ser Val Asp Glu Phe
192       50                  55                  60                  65
193       tct gca tct gtc ctc act gga aaa ctg acc act gtc ttc ctt cca att  298
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RAW SEQUENCE LISTING   DATE: 01/21/2004
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Input Set : N:\Crf3\RULE60\10643627.RAW.txt
Output Set: N:\CRF4\01212004\J643627.raw

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194        Ser Ala Ser Val Leu Thr Gly Lys Leu Thr Thr Val Phe Leu Pro Ile
195                        70              75                  80
196        gtc tac aca att gtg ttt gtg gtg ggt ttg cca agt aac ggc atg gcc    346
197        Val Tyr Thr Ile Val Phe Val Val Gly Leu Pro Ser Asn Gly Met Ala
198                        85              90                  95
199        ctg tgg gtc ttt ctt ttc cga act aag aag aag cac cct gct gtg att    394
200        Leu Trp Val Phe Leu Phe Arg Thr Lys Lys Lys His Pro Ala Val Ile
201                        100             105                 110
202        tac atg gcc aat ctg gcc ttg gct gac ctc ctc tct gtc atc tgg ttc    442
203        Tyr Met Ala Asn Leu Ala Leu Ala Asp Leu Leu Ser Val Ile Trp Phe
204                115             120                 125
205        ccc ttg aag att gcc tat cac ata cat ggc aac aac tgg att tat ggg    490
206        Pro Leu Lys Ile Ala Tyr His Ile His Gly Asn Asn Trp Ile Tyr Gly
207        130             135                 140                 145
208        gaa gct ctt tgt aat gtg ctt att ggc ttt ttc tat ggc aac atg tac    538
209        Glu Ala Leu Cys Asn Val Leu Ile Gly Phe Phe Tyr Gly Asn Met Tyr
210                        150             155                 160
211        tgt tcc att ctc ttc atg acc tgc ctc agt gtg cag agg tat tgg gtc    586
212        Cys Ser Ile Leu Phe Met Thr Cys Leu Ser Val Gln Arg Tyr Trp Val
213                        165             170                 175
214        atc gtg aac ccc atg ggg cac tcc agg aag aag gca aac att gcc att    634
215        Ile Val Asn Pro Met Gly His Ser Arg Lys Lys Ala Asn Ile Ala Ile
216                        180             185                 190
217        ggc atc tcc ctg gca ata tgg ctg ctg att ctg ctg gtc acc atc cct    682
218        Gly Ile Ser Leu Ala Ile Trp Leu Leu Ile Leu Leu Val Thr Ile Pro
219                195             200                 205
220        ttg tat gtc gtg aag cag acc atc ttc att cct gcc ctg aac atc acg    730
221        Leu Tyr Val Val Lys Gln Thr Ile Phe Ile Pro Ala Leu Asn Ile Thr
222        210             215                 220                 225
223        acc tgt cat gat gtt ttg cct gag cag ctc ttg gtg gga gac atg ttc    778
224        Thr Cys His Asp Val Leu Pro Glu Gln Leu Leu Val Gly Asp Met Phe
225                        230                 235                 240
226        aat tac ttc ctc tct ctg gcc att ggg gtc ttt ctg ttc cca gcc ttc    826
227        Asn Tyr Phe Leu Ser Leu Ala Ile Gly Val Phe Leu Phe Pro Ala Phe
228                        245                 250                 255
229        ctc aca gcc tct gcc tat gtg ctg atg atc aga atg ctg cga tct tct    874
230        Leu Thr Ala Ser Ala Tyr Val Leu Met Ile Arg Met Leu Arg Ser Ser
231                        260                 265                 270
232        gcc atg gat gaa aac tca gag aag aaa agg aag agg gcc atc aaa ctc    922
233        Ala Met Asp Glu Asn Ser Glu Lys Lys Arg Lys Arg Ala Ile Lys Leu
234                        275                 280                 285
235        att gtc act gtc ctg gcc atg tac ctg atc tgc ttc act cct agt aac    970
236        Ile Val Thr Val Leu Ala Met Tyr Leu Ile Cys Phe Thr Pro Ser Asn
237        290                 295                 300                 305
238        ctt ctg ctt gtg gtg cat tat ttt ctg att aag agc cag ggc cag agc    1018
239        Leu Leu Leu Val Val His Tyr Phe Leu Ile Lys Ser Gln Gly Gln Ser
240                        310                 315                 320
241        cat gtc tat gcc ctg tac att gta gcc ctc tgc ctc tct acc ctt aac    1066
242        His Val Tyr Ala Leu Tyr Ile Val Ala Leu Cys Leu Ser Thr Leu Asn
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RAW SEQUENCE LISTING ERROR SUMMARY   DATE: 01/21/2004
PATENT APPLICATION: **US/10/643,627**   TIME: 14:30:12

Input Set : **N:\Crf3\RULE60\10643627.RAW.txt**
Output Set: **N:\CRF4\01212004\J643627.raw**

Please Note:
Use of n and/or Xaa have been detected in the Sequence Listing. Please review the
Sequence Listing to ensure that a corresponding explanation is presented in the <220>
to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:9; Xaa Pos. 1
Seq#:10; Xaa Pos. 1
Seq#:11; Xaa Pos. 1,2
Seq#:12; Xaa Pos. 1,2
Seq#:13; Xaa Pos. 1
Seq#:14; Xaa Pos. 1
Seq#:15; Xaa Pos. 1
Seq#:16; Xaa Pos. 1
Seq#:17; Xaa Pos. 1
Seq#:18; Xaa Pos. 1
Seq#:50; Xaa Pos. 2
Seq#:51; Xaa Pos. 2
Seq#:52; Xaa Pos. 1
Seq#:53; Xaa Pos. 1
Seq#:56; Xaa Pos. 2
Seq#:57; Xaa Pos. 2
Seq#:58; Xaa Pos. 1
Seq#:59; Xaa Pos. 1

Invalid Line Length:
The rules require that a line not exceed 72 characters in length. This includes spaces.

Seq#:1; Line(s) 3

VERIFICATION SUMMARY   DATE: 01/21/2004
PATENT APPLICATION: **US/10/643,627**   TIME: 14:30:12

Input Set : **N:\Crf3\RULE60\10643627.RAW.txt**
Output Set: **N:\CRF4\01212004\J643627.raw**

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L:513 M:341 W:  (46) "n" or "Xaa" used, for SEQ ID#:9 after pos.:0
L:528 M:341 W:  (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:0
L:544 M:341 W:  (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:0
L:560 M:341 W:  (46) "n" or "Xaa" used, for SEQ ID#:12 after pos.:0
L:575 M:341 W:  (46) "n" or "Xaa" used, for SEQ ID#:13 after pos.:0
L:590 M:341 W:  (46) "n" or "Xaa" used, for SEQ ID#:14 after pos.:0
L:605 M:341 W:  (46) "n" or "Xaa" used, for SEQ ID#:15 after pos.:0
L:620 M:341 W:  (46) "n" or "Xaa" used, for SEQ ID#:16 after pos.:0
L:635 M:341 W:  (46) "n" or "Xaa" used, for SEQ ID#:17 after pos.:0
L:650 M:341 W:  (46) "n" or "Xaa" used, for SEQ ID#:18 after pos.:0
L:1008 M:341 W:  (46) "n" or "Xaa" used, for SEQ ID#:50 after pos.:0
L:1023 M:341 W:  (46) "n" or "Xaa" used, for SEQ ID#:51 after pos.:0
L:1039 M:341 W:  (46) "n" or "Xaa" used, for SEQ ID#:52 after pos.:0
L:1055 M:341 W:  (46) "n" or "Xaa" used, for SEQ ID#:53 after pos.:0
L:1092 M:341 W:  (46) "n" or "Xaa" used, for SEQ ID#:56 after pos.:0
L:1107 M:341 W:  (46) "n" or "Xaa" used, for SEQ ID#:57 after pos.:0
L:1123 M:341 W:  (46) "n" or "Xaa" used, for SEQ ID#:58 after pos.:0
L:1139 M:341 W:  (46) "n" or "Xaa" used, for SEQ ID#:59 after pos.:0
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